Working Memory Policy

Role	Signature	Print Name	Date
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First Base Working Memory Policy

Rationale:

First Base is dedicated to helping children overcome barriers to learning which may be negatively impacting on their education.

Short term and Working Memory (WM) are central to children's cognitive development and include skills which underpin thinking, reasoning and remembering, and even consciousness (Gathercole, 2008), so close associations with educational attainment are unsurprising. Psychologists use the term 'working memory' to describe the ability we have to hold in mind and mentally manipulate information over short periods of time. WM is often thought of as a mental workspace that we can use to store important information in the course of our mental activities. A good example of an activity that uses working memory is mental arithmetic. Imagine, for example, attempting to multiply 43 and 27 together, and spoken to you by another person, without being able to use a pen and paper or a calculator.

Difficulties in these areas can significantly impact on children's educational attainment, some claim, even more than IQ (Mukunda & Hall, 1997; Unsworth & Engle, 2007) and such difficulties can be easily overlooked in the classroom.
WM tasks involve holding information in active memory while simultaneously doing distracting or interfering activities (Case, Kurland & Goldbeg, 1982) such as mental arithmetic or remembering phone numbers.

Children's performance on measures of WM serve as a useful predictor of many cognitive skills, including literacy (De Jong, 1998, Swanson & Berninger, 1995; and Swanson, 1994) comprehension (Cain, Oakhill & Bryant, 2004) and mathematics (Bull & Sceri, 2001). According to research by Gathercole, Brown, and Pickering (2003) WM scores are significantly related to performance on national curriculum assessments in England. WM skills at four years old are also excellent predictors of children's achievements three years later, on national assessments. In contrast, children who fail to achieve expected levels in literacy and numeracy typically have poor WM skills. The correlations between WM and academic attainment occur because WM is used to store, process and integrate information during complex and demanding activities (Just and Carpenter, 1992).

Objective:

- The evidence and research around working memory provides possibilities to raise pupil's achievement at First Base PRU and this policy is to ensure we are committed to reduce this barrier of learning for our pupils.

Aims:

- This policy is based on our commitment to fostering educational inclusion in the classroom for all pupils regardless of their barriers to learning.

- To cultivate a school ethos where working memory and its impact on learning are understood through whole school and individual staff training and shared good practice.
- To assess children's WM on entry to First Base and again at exit.
- To introduce a WM intervention programme to raise educational attainment both with literacy and numeracy as suggested by several studies (Swanson, Zheng & Jerman, 2009(reading) and Swanson & Jerman, 2006 (arithmetic).
- To identify and adopt the most effective teaching approaches for pupils with poor working memories and share approach with colleagues.
- To ensure any adult working with a pupil with working memory difficulties are informed and educated on its impact to the pupil's learning and provide training to the mainstream school if required and work with other colleagues to deliver training on specific intervention programmes.
- To develop pupil's understanding of working and short term memory and provide them with transferrable skills to enhance their memories.

Roles and Responsibilities

- It will be the role of the SENCO to set up systems for screening pupils at "point of entry" identifying, assessing and reviewing provision for children with poor working memory once identified.
- All staff working with pupils will be responsible to make reasonable adjustments for those pupils with poor working memory.
- The class teachers will be responsible for making reasonable adjustments in their planning and teaching of these pupils.
- The SENCO will be responsible for monitoring reasonable adjustments are made in the classroom.
- The SENCO will ensure robust tracking systems are in place to collect and interpret specific pupil level assessment data allowing the school to identify value-added by its quality first teaching programme and intervention strategies.
- The SENCO will update the Head of Centre on the effectiveness of provision for pupils with poor working memory.
- The SENCO will identify resources needed to meet the needs of pupils with poor WM and advise the Head of Centre of priorities for expenditure.

Monitoring and Review of the policy:

The manager with responsibility for SEN is primarily responsible for monitoring the implementation of this policy. This will be through annual discussion with the SENCO and consideration of the evidence included in the SENCO's portfolio. The Manager will report on this to the management committee annually. The work of the SENCO will also be subject to review by the Head of Centre as part of our performance management arrangements.

References

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